



Natural Heritage &  
Endangered Species  
Program

Commonwealth of Massachusetts  
Division of Fisheries & Wildlife  
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MASSACHUSETTS ENDANGERED PLANTS

NARROW-LEAVED VERVAIN  
(*Verbena simplex* Lehm)

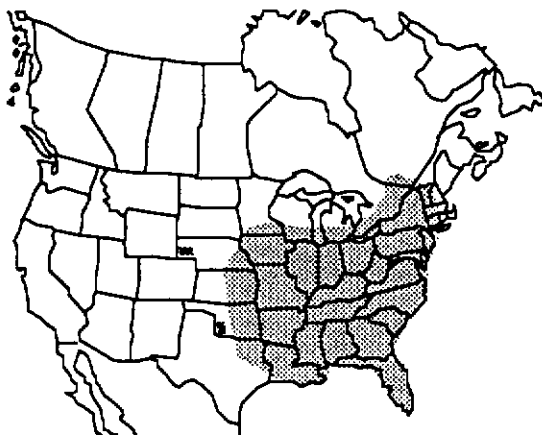
Description

Narrow-leaved Vervain, a member of the Vervain family (Verbenaceae), is a 2-6 dm (1 - 2 ft.) high, herbaceous perennial topped by one to a few slender spikes of small, lavender flowers. Its erect, finely hairy stem is simple or branched sparingly toward the top. The opposite, 3-10 cm (1 1/5 - 4 in.) long leaves are narrowly lanceolate in shape and taper toward their subsessile, or nearly stalkless, bases. In addition, the leaf margins have forward facing teeth. Narrow-leaved Vervain's lavender to purple flowers are 2-8 mm (2/25 - 8/25 in.) long and tube-shaped, with five corolla lobes flaring out at the summit. The nutlets (small, one-seeded, hard-walled fruits) are linear and 2.5-3 mm (1/10 - 1/12 in.) long. Narrow-leaved Vervain begins flowering in May and bears fruit from early July to mid September.

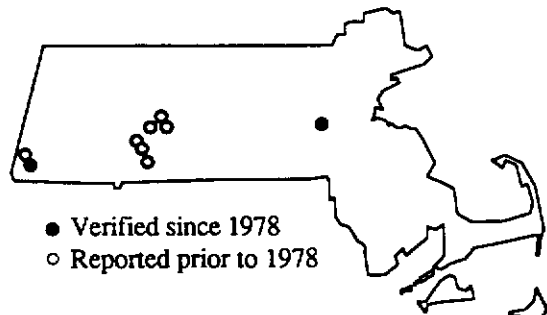
Range

The documented range of Narrow-leaved Vervain extends from Ontario to southwestern Quebec and from western New England to Minnesota, south to Texas and Florida.

Gleason, H.A. The New Britton and Brown Illustrated Flora of the US & Adjacent Canada. NY Botanical Garden, 1952.



Documented Range of Narrow-leaved Vervain



Massachusetts Distribution by Town

### Similar Species

Both Blue Vervain (*Verbena hastata*) and Hoary Vervain (*V. stricta*) could be mistaken for Narrow-leaved Vervain. However, Hoary Vervain has larger flowers than *V. simplex*--1.3 cm (1/2 in.) long as compared to 8 mm (1/3 in.). In addition, Hoary Vervain's stem is densely covered in stiff hairs. The leaves of Blue Vervain are generally larger than those of *V. simplex*, starting at about 10 cm (4 in.) long. (Only the largest leaves of Narrow-leaved Vervain reach this length.) Furthermore, Blue Vervain's leaves have short but definite stalks.

### Habitat in Massachusetts

Narrow-leaved Vervain prefers sunny areas with dry soils. Its habitats in Massachusetts include the upper walls of an abandoned marble quarry and a steeply pitched, traprock clearing on the southeastern slope of a mountain. Historical habitats (unverified since 1978) include a dry field and a sandy plain. Among its associated plant species are White Ash (*Fraxinus americana*), American Pennyroyal (*Hedeoma pulegioides*), and Staghorn Sumac (*Rhus typhina*). Rare Massachusetts plants that have been found with Narrow-leaved Vervain include Yellow Oak (*Quercus muhlenbergii*), Variegated Horsetail (*Equisetum variegatum*), and Barren Strawberry (*Waldsteinia fragarioides*).

### Population Status

*Verbena simplex* is presently listed as "Endangered" in Massachusetts, where there are two current stations (discovered or relocated since 1978) and seven historical stations (unverified since 1978). One current population is quite small. *Verbena simplex* is also considered rare in Minnesota and was present historically in Vermont, New Jersey and Delaware.